

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

| Application Serial Number: | 10/790 | ,224 | 4 | |
|----------------------------|---------------------|------------|----|-------|
| Source: | <i>i</i> – <i>i</i> | IFW | 0 | _ |
| Date Processed by STIC: | 3/11/ | <i>6</i> 4 | سة | |

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry directly to (EFFECTIVE 12/01/03):
 U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,224

DATE: 03/11/2004

TIME: 09:10:04

Input Set : D:\OP1741seqUS.txt

Output Set: N:\CRF4\03112004\J790224.raw

E--> 3 <110> APPLICANT: E- mandatory response reeded 5 <120> TITLE OF INVENTION: Method for producing L-arginine or L-lysine by fermentation

W--> 7 <130> FILE REFERENCE:

C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/790,224

C--> 9 <141> CURRENT FILING DATE: 2004-03-02

9 <150> PRIOR APPLICATION NUMBER: JP 2003-

10 <151> PRIOR FILING DATE: 2003-03-03

12 <160> NUMBER OF SEQ ID NOS: 24

14 <170> SOFTWARE: PatentIn Ver. 2.0

ERRORED SEQUENCES

516 <210> SEQ ID NO: 18 517 <211> LENGTH: 1045

Does Not Comply Corrected Diskette Needer

518 <212> TYPE: PRT 519 <213> ORGANISM: Brevibacterium lactofermentum 521 <400> SEQUENCE: 18 522 Met Ser Gly Pro Leu Arg Ser Glu Arg Lys Val Val Gly Phe Val Arg 5 10 524 Asp Pro Leu Pro Lys Val Gly Ser Leu Ser Leu Lys Ser Glu His Ala

25 20 526 Gln Ala Asp Leu Glu His Leu Gly Trp Arg Asn Val Glu Ser Leu Asp

528 Leu Leu Trp Gly Leu Ser Gly Ala Gly Asp Pro Asp Val Ala Leu Asn 55 529

530 Leu Leu Ile Arg Leu Tyr Gln Ala Leu Glu Ala Ile Gly Glu Asp Ala 70 532 Arg Asn Glu Leu Asp Gln Glu Ile Arg Gln Asp Glu Glu Leu Arq Val

534 Arg Leu Phe Ala Leu Leu Gly Gly Ser Ser Ala Val Gly Asp His Leu

100 105 110 536 Val Ala Asn Pro Leu Gln Trp Lys Leu Leu Lys Leu Asp Ala Pro Ser

115 120 125 537 538 Arg Glu Glu Met Phe Gln Ala Leu Leu Glu Ser Val Lys Ala Gln ,Pro

135 140

540 Ala Val Leu Glu Val Glu Asp Phe Ser Asp Ala His Asn Ile Ala Arg 150 155

542 Asp Asp Leu Ser Thr Pro Gly Phe Tyr Thr Ala Ser Val Thr Gly Pro 170

544 Glu Ala Glu Arg Val Leu Lys Trp Thr Tyr Arg Thr Leu Leu Thr Arg 180 185

546 Ile Ala Ala His Asp Leu Ala Gly Thr Tyr Pro Thr Asp Met Arg Arg

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DATE: 03/11/2004 TIME: 09:10:04

Input Set : D:\OP1741seqUS.txt
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| 547 | | | | | | | | 200 | | | | | 205 | | | |
|-----|-------|------|----------|-----|----------|----------|--------|----------|------------|-------|--------|------|----------|------------|---------|----------|
| 548 | Lys | Gly | Gly | Asp | Pro | Va∙l | Pro | Phe | Ser | Thr | Val | Thr | Met | Gln | Leu | Ser |
| 549 | | 210 | | | | | 215 | | | | | 220 | | | | |
| 550 | Asp | Leu | Ala | Asp | Ala | Ala | Leu | Thr | Ala | Ala | Leu | Ala | Val | Ala | Ile | Ala |
| | 225 | | | • | | 230 | | | | | 235 | | | | | 240 |
| | Asn | Val | Tvr | Glv | Glu | Lvs | Pro | Val | Asp | Ser | Ala | Leu | Ser | Val | Ile | Ala |
| 553 | 11011 | | - 1 - | J 1 | 245 | -1- | | | <u>.</u> | 250 | | | | | 255 | |
| | Met | Glv | Lus | Cvs | | Ala | Gln | Glu | Len | | Tyr | Tle | Ser | Asp | | Asp |
| 555 | 1100 | чтй | цуз | 260 | Ory | 711.Q | OIII | Olu | 265 | 11011 | | 110 | 501 | 270 | | 1100 |
| | Val | Wal | Dho | | 7/1 > | Glu | Dro | ЛΊэ | | Sar | Lus | Ser | Thr | | Thr | Δla |
| 557 | val | val | 275 | val | МІа | GLU | 110 | 280 | ASII | DCI | шуз | JCI | 285 | 111 9 | ¥ 111 ± | 1114 |
| | Ala | C1 | | Tlo | 7.20 | Tlo | Clu | | 7 cn | Sor | Pho | Dho | | Ual | Aen | ЛΊэ |
| | | | ьeu | rre | Arg | 116 | | ser | MSII | Ser | FIIC | 300 | GIU | vai | дор | AId |
| 559 | | 290 | 70 | Б | C1 | C1 | 295 | 0 | C1 | 70.1 | T | | 7) 20 00 | Cox | T 011 | 7.00 |
| | Ala | Leu | Arg | Pro | Glu | _ | ьуѕ | ser | GTÀ | Ата | | vaı | Arg | ser | ььеи | |
| | 305 | | | | | 310 | _ | _ | | | 315 | rm 1 | | a 3 | n) | 320 |
| | Ser | His | Met | Ala | | Tyr | Lys | Arg | Trp | | GIu | Thr | Trp | GLu | | GIn |
| 563 | | | | | 325 | | | | | 330 | | | | | 335 | |
| 564 | Ala | Leu | Leu | Lys | Ala | Arg | Pro | Met | | Gly | Asp | Ile | Asp | | Gly | Gln |
| 565 | | | | 340 | | | | | 345 | | | | | 350 | | |
| 566 | Ser | Tyr | Val | Asp | Ala | Leu | Ser | Pro | Leu | Ile | Trp | Ala | Ala | Ser | Gln | Arg |
| 567 | | | 355 | | | | • | 360 | | | | | 365 | | | |
| 568 | Glu | Ser | Phe | Val | Thr | Asp | Val | Gln | Ala | Met | Arg | Arg | Arg | Val | Leu | Asp |
| 569 | | 370 | | | | | 375 | | | | | 380 | | | | |
| 570 | Asn | Val | Pro | Glu | Asp | Leu | Arg | Asp | Arg | Glu | Leu | Lys | Leu | Gly | Arg | Gly |
| | 385 | | | | : | 390 | | - | _ | | 395 | | | | | 400 |
| | Gly | Leu | Ara | Asp | Val | Glu | Phe | Ala | Val | Gln | Leu | Leu | Gln | Met | Val | His |
| 573 | - | | 5 | - 1 | 405 | | | | | 410 | | | | | 415 | |
| | Gly | Ara | Tle | Asp | | Thr | Leu | Ara | Val | Ara | Ser | Thr | Val | Asn | Ala | Leu |
| 575 | O ± y | 1119 | | 420 | 01.0 | | 200 | 9 | 425 | | | | | 430 | | |
| | His | Val | T.013 | | Asn | Gln | ·G1v | Tur | | | Ara | Glu | Asp | | His | Asn |
| 577 | 111.5 | Val | 435 | vai | 7150 | 0111 | OLY | 440 | Vai | O.r.y | 1119 | 010 | 445 | 0.2.3 | | |
| | Leu | Tlo | | Sor | ጥተረድ | Clu | Dho | | Ara | Тди | Τ.Δ11 | Glu | | Δrα | Len | Gln |
| 579 | | 450 | Gru | SET | тут | GLU | 455 | neu | ALG | пец | 1.1C U | 460 | 111.0 | 1119 | пси | 0.1.11 |
| | Leu | | 70 × × × | т1о | Lvc | 71 * ~ | | шіс | T 011 | Tòu | Dro | | Dro | Aen | 7) en | Δra |
| | | GIU | Arg | тте | гу | 470 | 1111 | птэ | цец | пец | 475 | пЛЭ | 110 | тэр | дэр | 480 |
| | 465 | 7 | Mad | 7 | (T) 2020 | | 7\ 7 - | 7) 20 00 | 7. 7 | Com | | Dho | Thr. | C111 | Cor | |
| | Met | ASI | мет | Arg | | ьеи | Ald | Arg | Ата | | атХ | rne | TIIT | СТУ | | Mec |
| 583 | | ~ 1 | _ | _ | 485 | - | 70.7 | | G 1 | 490 | ,,, | T | 70 | T | 495 | 7) 20 00 |
| | Glu | GIn | Ser | | Ala | ьуs | Ala | мет | | Arg | HIS | ьeu | Arg | | vaı | Arg |
| 585 | | | | 500 | | | | _ | 505 | _ | | _ | _ | 510 | _ | _ |
| | Leu | Gln | | Gln | Ser | Leu | His | | Gln | Leu | Phe | Tyr | | Pro | Leu | Leu |
| 587 | | | 515 | | | | | 520 | | | | | 525 | | | |
| 588 | Asn | Ser | Val | Val | Asn | Leu | Ser | Ala | Asp | Ala | Ile | Arg | Leu | Ser | Pro | Asp |
| 589 | | 530 | | | | | 535 | | | | | 540 | | | | |
| 590 | Ala | Ala | Lys | Leu | Gln | Leu | Gly | Ala | Leu | Gly | Tyr | Leu | His | Pro | Ser | Arg |
| | 545 | | | | | 550 | | | | | 555 | | | | | 560 |
| 592 | Ala | Tyr | Glu | His | Leu | Thr | Ala | Leu | Ala | Ser | Gly | Ala | Ser | Arg | Lys | Ala |
| 593 | | - | | | 565 | | | | | 570 | | | | | 575 | |
| | Lys | Ile | Gln | Ala | Met | Leu | Leu | Pro | Thr | Leu | Met | Glu | Trp | Leu | Ser | Gln |
| 595 | _ | | | 580 | | | | | 585 | | | | | 590 | | |
| | | | | | | | | | | | | | | | | |

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/790,224

DATE: 03/11/2004 TIME: 09:10:04

Input Set : D:\OP1741seqUS.txt

Output Set: N:\CRF4\03112004\J790224.raw

| | 596 597 | | Ala | Glu 595 | Pro | Asp | Ala | Gly | Leu 600 | Leu | Asn | Tyr | Arg | Lys 605 | Leu | Ser | Asp |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 598 599 | Ala | Ser 610 | Tyr | Asp | Arg | Ser | Trp 615 | Phe | Leu | Arg | Met | Leu 620 | Arg | Asp | Glu | Gly |
| ٠ | | Val 625 | Val | Gly | Gln | Arg | Leu 630 | Met | Arg. | Ile | Leu | Gly 635 | Asn | Ser | Pro | Tyr | Ile 640 |
| | 602 603 | Ser | Glu | Leu | Ile | Ile 645 | Ser | Thr | Pro | Asp | Phe 650 | Val | Lys | Gln | Leu | Gly 655 | Asp |
| | 604 605 | Ala | Ala | Ser | Gly 660 | Pro | Lys | Leu | Leu | Ala 665 | Thr | Ala | Pro | Thr | Gln 670 | Val | Val |
| | 607 | - | | 675 | Lys | | | | 680 | | | | | 685 | - | | |
| | 609 | | 690 | | Ala | - | | 695 | - | | | | 700 | | | | |
| | 611 | 705 | | _ | Leu | | 710 | | | | | 71,5 | | | | | 720 |
| | 613 | | | | Val | 725 | | | | | 730 | | | | | 735 | |
| | 615 | | | | Ala 740 | | | | | 745 | | | | | 750 | | |
| | 617 | | | 755 | Val | | _ | | 760 | | | | | 765 | | | |
| | 619 | | 770. | | Asp | | | 775 | | | | | 780 | | | | |
| | 621 | 785 | | | His | | 790 | | | | | 795 | | | | | 800 |
| | 623 | | _ | | Arg | 805 | | | | | 810 | | | | | 815 | |
| | 625 | - | | - | Leu 820 | | | | _ | 825 | | | | | 830 | | |
| | 627 | | _ | 835 | Tyr | | - | _ | 840 | | _ | | | 845 | | | |
| | 629 | | 850 | | Leu | | | 855 | | | | | 860 | | | | |
| | 631 | 865 | | _ | Phe | | 870 | | | | | 875 | | | | | 880 |
| | 633 | - | | | Gln | 885 | | | _ | | 890 | _ | | | | 895 | |
| | 635 | | | | Glu 900 | | | | | 905 | • | | | | 910 | | |
| | 637 | | | 915 | | | | | 920 | | | | | 925 | | | Leu |
| | 639 | | 930 | | Met | • | • | 935 | | | | | 940 | | | | |
| | 641 | 945 | | | Val | | 950 | | | | | 955 | | | | | 960 |
| | 643 | | | | Gln | 965 | | | | | 970 | | | | • | 975 | |
| | 644 | Arg | Asn | Ala | Leu | Val | Leu | Val | Arg | Gly | Lys | Arg | Leu | Asp | GIn | Leu | Pro |

RAW SEQUENCE LISTING

1045

653

DATE: 03/11/2004

PATENT APPLICATION: US/10/790,224

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Output Set: N:\CRF4\03112004\J790224.raw

645 980 985 990
646 Thr Pro Gly Pro His Leu Ala Gln Val Ala Gly Ala Ser Gly Trp Asp
647 995 1000 1005
648 Pro Asn Glu Tyr Gln Glu Tyr Leu Glu Asn Tyr Leu Lys Val Thr Arg
649 1010 1015 1020
650 Lys Ser Arg Gln Val Val Asp Glu Val Phe Trp Gly Val Asp Ser Met

E--> 651 025 1025 1030 1035 1040
652 Glu Gln Arg Glu Phe

When rumbing
the first animo
acid on a line,
begin the rumber
directly usder
the first letter
of the amino acid.

e.g. Lys | | Ser
1025 | e

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/790,224

DATE: 03/11/2004 TIME: 09:10:05

Input Set : D:\OP1741seqUS.txt

Output Set: N:\CRF4\03112004\J790224.raw

L:3 M:282 E: Numeric Field Identifier Missing, <110> APPLICANT NAME

L:7 M:201 W: Mandatory field data missing, <130> FILE REFERENCE

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:651 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:18